Surface Science 248 (1991) 411–413
North-Holland

Author index

Alkemade, P.F.A., W.N. Lennard and I.V. Mitchell, The transport of keV energy electrons in Si studied by ion-induced Auger excitation in combination with channeling 248 (1991) 173
Anderson, A.B., see Mehandru 248 (1991) 369
Anderson, J., see Papagno 248 (1991) 343
Avnir, D., see Seri-Levy 248 (1991) 258

Barteau, M.A., see Houtman 248 (1991) 57
Bell, A.T., see Shustorovich 248 (1991) 359
Bermudez, V.M. and S.M. Prokes, Infrared reflection absorption spectroscopy of adsorbates on semiconductors with buried metal layers – O_2/GaAs 248 (1991) 201
Bernasek, S.L., see Hung 248 (1991) 332
Bischoff, J.L., F. Lutz, D. Bolmont and L. Kubler, UPS differentiation between molecular NH_3 and partially dissociated NH_2 fragments adsorbed at low temperature on Si(001) surfaces 248 (1991) L240
Bolmont, D., see Bischoff 248 (1991) L240
Bostanov, V., see Höpfner 248 (1991) 225
Bradshaw, A.M., see Song 248 (1991) L279
Budevski, E., see Höpfner 248 (1991) 225
Budevski, E., see Staikov 248 (1991) 234
Butz, R., see Erley 248 (1991) 193

Caputi, L.S., see Papagno 248 (1991) 343
Chambers, S.A., Surface dimer formation on GaAs(001)-c(2 × 8)/(2 × 4) studied by X-ray photoelectron diffraction 248 (1991) L274
Chen, Y., see Papagno 248 (1991) 343
Chorkendorff, I. and P.B. Rasmussen, Reconstruction of Cu(100) by adsorption of atomic hydrogen 248 (1991) 35
Chung, Y.W., see Levine 248 (1991) 215
Cohen, J.B., see Levine 248 (1991) 215
Conrad, H., see Song 248 (1991) L279
Cowley, J.M., see Gajdardziska-Josifovska 248 (1991) L259
Crozier, P.A., see Gajdardziska-Josifovska 248 (1991) L259

Dai, Q. and A.J. Gellman, A structural examination of nitrogen on Cu(100) and Cu(110) surfaces 248 (1991) 86
DePristo, A.E., see Raeker 248 (1991) 134
Diebold, U., W. Möller and P. Varga, Low-energy ion impact desorption cross sections of carbon monoxide from Ni(111) 248 (1991) 147
Döbele, H.F., see Goehlich 248 (1991) 271

Erley, W., R. Butz and S. Mantl, External infrared reflection absorption spectroscopy of methanol on an epitaxially grown Si(100)2 × 1 surface 248 (1991) 193
Ertl, G., see Wolf 248 (1991) L235

Falconer, J.L., see Magrini 248 (1991) 93
Frankel, D., see Papagno 248 (1991) 343
Fuggle, J.C., see Kappert 248 (1991) L245

Gajdardziska-Josifovska, M., P.A. Crozier and J.M. Cowley, A (3 × 3)R30° reconstruction on annealed (111) surfaces of MgO 248 (1991) L259
Gao, Q. and J.C. Hemminger, A vibrational spectroscopy study of CH_3COOH,CH_3COOD and $^{13}CD_3COOH$ (D) adsorption on Pt(111). I. Surface dimer formation and hydrogen bonding 248 (1991) 45
Gardner, P., see Song 248 (1991) L279
Gebhard, S.C., see Magrini 248 (1991) 93
Gebhard, S.C., see Hutson 248 (1991) 119
Gellman, A.J., see Dai 248 (1991) 86
George, S.M., see Koehler 248 (1991) 158
Goedkoop, J.B., see Kappert 248 (1991) L245
Goehlich, A., M. Röwekamp and H.F. Döbele, Determination of the velocity distribution of sputtered atomic oxygen by laser-induced fluorescence in the vacuum-ultraviolet (130 nm) 248 (1991) 271
Grioni, M., see Kappert 248 (1991) L245
Gusev, E.P. and A.P. Popov, Initial oxidation of metals: thermodynamic aspects 248 (1991) 241

Hanley, L., Z. Xu and J.T. Yates, Jr., Methane activation on Ni(111) at high pressures 248 (1991) L265
Hasselbrink, E., see Wolf 248 (1991) L235
Hemminger, J.C., see Gao 248 (1991) 45

Elsevier Science Publishers B.V. (North-Holland)

Henderson, M.A., G.E. Mitchell and J.M. White, CH_3 and CH_3I chemistry on Pt(111): the influence of CO 248 (1991) 279
Henzler, M., see Köhler 248 (1991) 321
Höpfner, M., W. Obretenov, K. Jüttner, W.J. Lorenz, G. Staikov, V. Bostanov and E. Budevski, STM studies of real and quasi-perfect silver single crystal surfaces used in electrochemical experiments 248 (1991) 225
Höpfner, M., see Staikov 248 (1991) 234
Houtman, C. and M.A. Barteau, Reactions of formic acid and formaldehyde on Rh(111) and Rh(111)-(2 × 2)O surfaces 248 (1991) 57
Hung, W.-H., J. Schwartz and S.L. Bernasek, Sequential oxidation of Fe(100) by water adsorption: formation of an ordered hydroxylated surface 248 (1991) 332
Hutson, F.L., D.E. Ramaker and B.E. Koel, Spectroscopic evidence for carbon–carbon bonding in "carbidic" layers on metals 248 (1991) 104
Hutson, F.L., D.E. Ramaker, B.E. Koel and S.C. Gebhard, Interpretation of the carbon Auger line shapes for the adsorption and decomposition of ethylene on Ni(100) 248 (1991) 119

Jusko, O., see Köhler 248 (1991) 321
Jüttner, K., see Höpfner 248 (1991) 225
Jüttner, K., see Staikov 248 (1991) 234

Kang, H.C., see Schmitz 248 (1991) 287
Kappert, R.J.H., M. Sacchi, J.B. Goedkoop, M. Grioni and J.C. Fuggle, X-ray dichroism of Dy overlayers on Ni(110) 248 (1991) L245
Kariotis, R. and M.G. Lagally, Calculation of terrace-edge structure distributions for vicinal surfaces 248 (1991) 295
Kariotis, R., Terrace-edge separation distribution 248 (1991) 306
Kennou, S. and T.A. Nguyen Tan, Potassium adsorption on β-$FeSi_2$ thin films 248 (1991) L255
Koehler, B.G. and S.M. George, Laser-induced desorption of H_2 from Si(111)-7 × 7 248 (1991) 158
Koel, B.E., see Magrini 248 (1991) 93
Koel, B.E., see Hutson 248 (1991) 104
Koel, B.E., see Hutson 248 (1991) 119
Köhler, U., O. Jusko, G. Pietsch, B. Müller and M. Henzler, Strained-layer growth and islanding of germanium on Si(111)-(7 × 7) studied with STM 248 (1991) 321
Komiyama, H., see Yanase 248 (1991) 11
Komiyama, H., see Yanase 248 (1991) 20

Kubler, L., see Bischoff 248 (1991) L240
Kundzich, A.G., P.P. Lutsishin, O.A. Panchenko, S.V. Sologub and V.F. Shpagin, Diffraction of conduction electrons on deuterium film-covered metal surfaces 248 (1991) 207

Lagally, M.G., see Kariotis 248 (1991) 295
Lagally, M.G., see Mo 248 (1991) 313
Lapeyre, G.J., see Papagno 248 (1991) 343
Lennard, W.N., see Alkemade 248 (1991) 173
Leung, W.-Y., see Schmitz 248 (1991) 287
Levine, J.R., J.B. Cohen and Y.W. Chung, Thin film island growth kinetics: a grazing incidence small angle X-ray scattering study of gold on glass 248 (1991) 215
Lindroos, M., see Pfnür 248 (1991) 1
Lorenz, W.J., see Höpfner 248 (1991) 225
Lorenz, W.J., see Staikov 248 (1991) 234
Lu, Y.-T., see Zhang 248 (1991) L250
Lutsishin, P.P., see Kundzich 248 (1991) 207
Lutz, F., see Bischoff 248 (1991) L240

Magrini, K.A., S.C. Gebhard, B.E. Koel and J.L. Falconer, Methyl chloride and trichlorosilane adsorption on Cu(110) 248 (1991) 93
Mantl, S., see Erley 248 (1991) 193
Mehandru, S.P. and A.B. Anderson, Adsorption of H, CH_3, CH_2 and C_2H_2 on 2 × 1 restructured diamond (100). Theoretical study of structures, bonding, and migration 248 (1991) 369
Menzel, D., see Pfnür 248 (1991) 1
Metiu, H., see Zhang 248 (1991) L250
Mitchell, G.E., see Henderson 248 (1991) 279
Mitchell, I.V., see Alkemade 248 (1991) 173
Mix, W., see Rechtien 248 (1991) 27
Mo, Y.-W. and M.G. Lagally, Anisotropy in surface migration of Si and Ge on Si(001) 248 (1991) 313
Möller, W., see Diebold 248 (1991) 147
Müller, B., see Köhler 248 (1991) 321
Muller, R.H., see Schwartz 248 (1991) 349

Nguyen Tan, T.A., see Kennou 248 (1991) L255
Novacek, P. and P. Varga, Analyses of the adsorption of oxygen and hydrogen on Pt_xNi_{1-x} alloys using ion scattering spectroscopy 248 (1991) 183

Obretenov, W., see Höpfner 248 (1991) 225
Obretenov, W., see Staikov 248 (1991) 234

Panchenko, O.A., see Kundzich 248 (1991) 207
Papagno, L., D. Frankel, Y. Chen, L.S. Caputi, J. Anderson and G.J. Lapeyre, Study of dissociation of water on

Ge(100) by high-resolution electron-energy-loss spectroscopy 248 (1991) 343
Pfnür, H., M. Lindroos and D. Menzel, Investigation of adsorbates with low energy electron diffraction at very low energies (VLEED) 248 (1991) 1
Pietsch, G., see Köhler 248 (1991) 321
Popov, A.P., see Gusev 248 (1991) 241
Prokes, S.M., see Bermudez 248 (1991) 201

Raeker, T.J. and A.E. DePristo, Theoretical studies of dynamical phenomena in epitaxial surface systems 248 (1991) 134
Ramaker, D.E., see Hutson 248 (1991) 104
Ramaker, D.E., see Hutson 248 (1991) 119
Rasmussen, P.B., see Chorkendorff 248 (1991) 35
Rechtien, J.-H., W. Mix and K.J. Snowdon, Observation of multiple discrete energy losses in Ar^+ scattering from a Cu(111) surface 248 (1991) 27
Röwekamp, M., see Goehlich 248 (1991) 271

Sacchi, M., see Kappert 248 (1991) L245
Schmitz, P.J., H.C. Kang, W.-Y. Leung and P.A. Thiel, Growth mode and CO adsorption properties of Au films on Pd(110) 248 (1991) 287
Schwartz, D.T. and R.H. Muller, Oxidation films on copper in alkaline media: intensity modulated photoelectrochemical and Raman spectroscopy studies 248 (1991) 349
Schwartz, J., see Hung 248 (1991) 332
Seri-Levy, A. and D. Avnir, Fractal analysis of surface geometry effects on catalytic reactions 248 (1991) 258
Shpagin, V.F., see Kundzich 248 (1991) 207
Shustorovich, E. and A.T. Bell, An analysis of Fischer–Tropsch synthesis by the bond-order-conservation-Morse-potential approach 248 (1991) 359
Snowdon, K.J., see Rechtien 248 (1991) 27
Sologub, S.V., see Kundzich 248 (1991) 207
Song, Y., P. Gardner, H. Conrad, A.M. Bradshaw and J.M. White, A HREELS study of the UV photon-induced chemistry of C_6H_5Cl adsorbed on Ag{111} 248 (1991) L279
Staikov, G., see Höpfner 248 (1991) 225
Staikov, G., E. Budevski, M. Höpfner, W. Obretenov, K. Jüttner and W.J. Lorenz, New aspects in underpotential–overpotential transitions in metal deposition processes 248 (1991) 234
Sumi, H., Theory on laser sputtering by high-density valence-electron excitation of semiconductor surfaces 248 (1991) 382

Thiel, P.A., see Schmitz 248 (1991) 287
Tofterup, A.L., Depth profiling through quantitative analysis of energy spectra in XPS and AES: analytical formalism 248 (1991) 77

Varga, P., see Diebold 248 (1991) 147
Varga, P., see Novacek 248 (1991) 183

White, J.M., see Wolf 248 (1991) L235
White, J.M., see Song 248 (1991) L279
White, J.M., see Henderson 248 (1991) 279
Wolf, M., E. Hasselbrink, G. Ertl, X.-Y. Zhu and J.M. White, Excitation mechanism in the photodissociation of dioxygen adsorbed on Pd(111) 248 (1991) L235

Xu, Z., see Hanley 248 (1991) L265

Yanase, A. and H. Komiyama, In situ observation of oxidation and reduction of small supported copper particles using optical absorption and X-ray diffraction 248 (1991) 11
Yanase, A. and H. Komiyama, Real-time optical observation of morphological change of small supported copper particles during redox treatments 248 (1991) 20
Yates, Jr., J.T., see Hanley 248 (1991) L265

Zhang, Z.-Y., Y.-T. Lu and H. Metiu, Adsorption and diffusion sites of a Si atom on a reconstructed Si(100)–(2×1) surface 248 (1991) L250
Zhu, X.-Y., see Wolf 248 (1991) L235

Surface Science 248 (1991) 414–421
North-Holland

Subject index

Alkali metals

S. Kennou and T.A. Nguyen Tan, Potassium adsorption on β-$FeSi_2$ thin films 248 (1991) L255

Alloys

P. Novacek and P. Varga, Analyses of the adsorption of oxygen and hydrogen on Pt_xNi_{1-x} alloys using ion scattering spectroscopy 248 (1991) 183

Ammonia

J.L. Bischoff, F. Lutz, D. Bolmont and L. Kubler, UPS differentiation between molecular NH_3 and partially dissociated NH_2 fragments adsorbed at low temperature on Si(001) surfaces 248 (1991) L240

Auger electron spectroscopy

S. Kennou and T.A. Nguyen Tan, Potassium adsorption on β-$FeSi_2$ thin films 248 (1991) L255

A.L. Tofterup, Depth profiling through quantitative analysis of energy spectra in XPS and AES: analytical formalism 248 (1991) 77

F.L. Hutson, D.E. Ramaker and B.E. Koel, Spectroscopic evidence for carbon–carbon bonding in "carbidic" layers on metals 248 (1991) 104

F.L. Hutson, D.E. Ramaker, B.E. Koel and S.C. Gebhard, Interpretation of the carbon Auger line shapes for the adsorption and decomposition of ethylene on Ni(100) 248 (1991) 119

P.F.A. Alkemade, W.N. Lennard and I.V. Mitchell, The transport of keV energy electrons in Si studied by ion-induced Auger excitation in combination with channeling 248 (1991) 173

L. Hanley, Z. Xu and J.T. Yates, Jr., Methane activation on Ni(111) at high pressures 248 (1991) L265

P.J. Schmitz, H.C. Kang, W.-Y. Leung and P.A. Thiel, Growth mode and CO adsorption properties of Au films on Pd(110) 248 (1991) 287

Carbon

F.L. Hutson, D.E. Ramaker and B.E. Koel, Spectroscopic evidence for carbon–carbon bonding in "carbidic" layers on metals 248 (1991) 104

S.P. Mehandru and A.B. Anderson, Adsorption of H, CH_3, CH_2 and C_2H_2 on 2×1 restructured diamond (100). Theoretical study of structures, bonding, and migration 248 (1991) 369

Carbon monoxide

U. Diebold, W. Möller and P. Varga, Low-energy ion impact desorption cross sections of carbon monoxide from Ni(111) 248 (1991) 147

M.A. Henderson, G.E. Mitchell and J.M. White, CH_3 and CH_3I chemistry on Pt(111): the influence of CO 248 (1991) 279

P.J. Schmitz, H.C. Kang, W.-Y. Leung and P.A. Thiel, Growth mode and CO adsorption properties of Au films on Pd(110) 248 (1991) 287

E. Shustorovich and A.T. Bell, An analysis of Fischer–Tropsch synthesis by the bond-order-conservation-Morse-potential approach 248 (1991) 359

Carboxylic acid

Q. Gao and J.C. Hemminger, A vibrational spectroscopy study of CH_3COOH,CH_3COOD and $^{13}CD_3COOH$ (D) adsorption on Pt(111). I. Surface dimer formation and hydrogen bonding 248 (1991) 45

C. Houtman and M.A. Barteau, Reactions of formic acid and formaldehyde

Elsevier Science Publishers B.V. (North-Holland)

on Rh(111) and Rh(111)–(2 × 2)O surfaces 248 (1991) 57

Catalysis

A. Seri-Levy and D. Avnir, Fractal analysis of surface geometry effects on catalytic reactions 248 (1991) 258

Chemisorption theory

E. Shustorovich and A.T. Bell, An analysis of Fischer–Tropsch synthesis by the bond-order-conservation-Morse-potential approach 248 (1991) 359

S.P. Mehandru and A.B. Anderson, Adsorption of H, CH_3, CH_2 and C_2H_2 on 2 × 1 restructured diamond (100). Theoretical study of structures, bonding, and migration 248 (1991) 369

Conductivity

A.G. Kundzich, P.P. Lutsishin, O.A. Panchenko, S.V. Sologub and V.F. Shpagin, Diffraction of conduction electrons on deuterium film-covered metal surfaces 248 (1991) 207

Copper

A. Yanase and H. Komiyama, In situ observation of oxidation and reduction of small supported copper particles using optical absorption and X-ray diffraction 248 (1991) 11

A. Yanase and H. Komiyama, Real-time optical observation of morphological change of small supported copper particles during redox treatments 248 (1991) 20

J.-H. Rechtien, W. Mix and K.J. Snowdon, Observation of multiple discrete energy losses in Ar^+ scattering from a Cu(111) surface 248 (1991) 27

I. Chorkendorff and P.B. Rasmussen, Reconstruction of Cu(100) by adsorption of atomic hydrogen 248 (1991) 35

Q. Dai and A.J. Gellman, A structural examination of nitrogen on Cu(100) and Cu(110) surfaces 248 (1991) 86

K.A. Magrini, S.C. Gebhard, B.E. Koel and J.L. Falconer, Methyl chloride and trichlorosilane adsorption on Cu(110) 248 (1991) 93

D.T. Schwartz and R.H. Muller, Oxidation films on copper in alkaline media: intensity modulated photoelectrochemical and Raman spectroscopy studies 248 (1991) 349

Deuterium

A.G. Kundzich, P.P. Lutsishin, O.A. Panchenko, S.V. Sologub and V.F. Shpagin, Diffraction of conduction electrons on deuterium film-covered metal surfaces 248 (1991) 207

Dielectric constant

A. Yanase and H. Komiyama, Real-time optical observation of morphological change of small supported copper particles during redox treatments 248 (1991) 20

Electron diffraction, see also Low energy electron diffraction

M. Gajdardziska-Josifovska, P.A. Crozier and J.M. Cowley, A (3 × 3)R30° reconstruction on annealed (111) surfaces of MgO 248 (1991) L259

S.A. Chambers, Surface dimer formation on GaAs(001)–c(2 × 8)/(2 × 4) studied by X-ray photoelectron diffraction 248 (1991) L274

Electron energy loss spectroscopy

M. Wolf, E. Hasselbrink, G. Ertl, X.-Y. Zhu and J.M. White, Excitation mechanism in the photodissociation of dioxygen adsorbed on Pd(111) 248 (1991) L235

I. Chorkendorff and P.B. Rasmussen, Reconstruction of Cu(100) by adsorption of atomic hydrogen 248 (1991) 35

Q. Gao and J.C. Hemminger, A vibrational spectroscopy study of CH_3COOH,CH_3COOD and $^{13}CD_3COOH$ (D) adsorption on Pt(111). I. Surface dimer formation and hydrogen bonding 248 (1991) 45

C. Houtman and M.A. Barteau, Reactions of formic acid and formaldehyde on Rh(111) and Rh(111)–(2 × 2)O surfaces 248 (1991) 57

Q. Dai and A.J. Gellman, A structural examination of nitrogen on Cu(100) and Cu(110) surfaces 248 (1991) 86

K.A. Magrini, S.C. Gebhard, B.E. Koel and J.L. Falconer, Methyl chloride and trichlorosilane adsorption on Cu(110) 248 (1991) 93

F.L. Hutson, D.E. Ramaker and B.E. Koel, Spectroscopic evidence for carbon–carbon bonding in "carbidic" layers on metals 248 (1991) 104
Y. Song, P. Gardner, H. Conrad, A.M. Bradshaw and J.M. White, A HREELS study of the UV photon-induced chemistry of C_6H_5Cl adsorbed on Ag{111} 248 (1991) L279
M.A. Henderson, G.E. Mitchell and J.M. White, CH_3 and CH_3I chemistry on Pt(111): the influence of CO 248 (1991) 279
W.-H. Hung, J. Schwartz and S.L. Bernasek, Sequential oxidation of Fe(100) by water adsorption: formation of an ordered hydroxylated surface 248 (1991) 332
L. Papagno, D. Frankel, Y. Chen, L.S. Caputi, J. Anderson and G.J. Lapeyre, Study of dissociation of water on Ge(100) by high-resolution electron-energy-loss spectroscopy 248 (1991) 343

Electron microscopy

M. Gajdardziska-Josifovska, P.A. Crozier and J.M. Cowley, A $(3 \times 3)R30°$ reconstruction on annealed (111) surfaces of MgO 248 (1991) L259

Ellipsometry

D.T. Schwartz and R.H. Muller, Oxidation films on copper in alkaline media: intensity modulated photoelectrochemical and Raman spectroscopy studies 248 (1991) 349

Epitaxy

T.J. Raeker and A.E. DePristo, Theoretical studies of dynamical phenomena in epitaxial surface systems 248 (1991) 134

Ethylene

F.L. Hutson, D.E. Ramaker, B.E. Koel and S.C. Gebhard, Interpretation of the carbon Auger line shapes for the adsorption and decomposition of ethylene on Ni(100) 248 (1991) 119
S.P. Mehandru and A.B. Anderson, Adsorption of H, CH_3, CH_2 and C_2H_2 on 2×1 restructured diamond (100). Theoretical study of structures, bonding, and migration 248 (1991) 369

Gallium arsenide

V.M. Bermudez and S.M. Prokes, Infrared reflection absorption spectroscopy of adsorbates on semiconductors with buried metal layers – O_2/GaAs 248 (1991) 201
S.A. Chambers, Surface dimer formation on GaAs(001)–$c(2 \times 8)/(2 \times 4)$ studied by X-ray photoelectron diffraction 248 (1991) L274

Gallium phosphide

H. Sumi, Theory on laser sputtering by high-density valence-electron excitation of semiconductor surfaces 248 (1991) 382

Germanium

Y.-W. Mo and M.G. Lagally, Anisotropy in surface migration of Si and Ge on Si(001) 248 (1991) 313
U. Köhler, O. Jusko, G. Pietsch, B. Müller and M. Henzler, Strained-layer growth and islanding of germanium on Si(111)–(7×7) studied with STM 248 (1991) 321
L. Papagno, D. Frankel, Y. Chen, L.S. Caputi, J. Anderson and G.J. Lapeyre, Study of dissociation of water on Ge(100) by high-resolution electron-energy-loss spectroscopy 248 (1991) 343

Glass

J.R. Levine, J.B. Cohen and Y.W. Chung, Thin film island growth kinetics: a grazing incidence small angle X-ray scattering study of gold on glass 248 (1991) 215

Gold

J.R. Levine, J.B. Cohen and Y.W. Chung, Thin film island growth kinetics: a grazing incidence small angle X-ray scattering study of gold on glass 248 (1991) 215
P.J. Schmitz, H.C. Kang, W.-Y. Leung and P.A. Thiel, Growth mode and CO adsorption properties of Au films on Pd(110) 248 (1991) 287

Hydrogen

I. Chorkendorff and P.B. Rasmussen, Reconstruction of Cu(100) by adsorption of atomic hydrogen 248 (1991) 35

B.G. Koehler and S.M. George, Laser-induced desorption of H_2 from Si(111)-7×7 248 (1991) 158
P. Novacek and P. Varga, Analyses of the adsorption of oxygen and hydrogen on Pt_xNi_{1-x} alloys using ion scattering spectroscopy 248 (1991) 183
S.P. Mehandru and A.B. Anderson, Adsorption of H, CH_3, CH_2 and C_2H_2 on 2×1 restructured diamond (100). Theoretical study of structures, bonding, and migration 248 (1991) 369

Infrared spectroscopy

W. Erley, R. Butz and S. Mantl, External infrared reflection absorption spectroscopy of methanol on an epitaxially grown Si(100)2×1 surface 248 (1991) 193
V.M. Bermudez and S.M. Prokes, Infrared reflection absorption spectroscopy of adsorbates on semiconductors with buried metal layers – O_2/GaAs 248 (1991) 201

Ion bombardment

U. Diebold, W. Möller and P. Varga, Low-energy ion impact desorption cross sections of carbon monoxide from Ni(111) 248 (1991) 147

Ion scattering

J.-H. Rechtien, W. Mix and K.J. Snowdon, Observation of multiple discrete energy losses in Ar^+ scattering from a Cu(111) surface 248 (1991) 27
P.F.A. Alkemade, W.N. Lennard and I.V. Mitchell, The transport of keV energy electrons in Si studied by ion-induced Auger excitation in combination with channeling 248 (1991) 173
P. Novacek and P. Varga, Analyses of the adsorption of oxygen and hydrogen on Pt_xNi_{1-x} alloys using ion scattering spectroscopy 248 (1991) 183

Iridium

B.G. Koehler and S.M. George, Laser-induced desorption of H_2 from Si(111)-7×7 248 (1991) 158

Iron

W.-H. Hung, J. Schwartz and S.L. Bernasek, Sequential oxidation of Fe(100) by water adsorption: formation of an ordered hydroxylated surface 248 (1991) 332

Lanthanides

R.J.H. Kappert, M. Sacchi, J.B. Goedkoop, M. Grioni and J.C. Fuggle, X-ray dichroism of Dy overlayers on Ni(110) 248 (1991) L245

Low energy electron diffraction

H. Pfnür, M. Lindroos and D. Menzel, Investigation of adsorbates with low energy electron diffraction at very low energies (VLEED) 248 (1991) 1
W.-H. Hung, J. Schwartz and S.L. Bernasek, Sequential oxidation of Fe(100) by water adsorption: formation of an ordered hydroxylated surface 248 (1991) 332

Magnesium oxide

M. Gajdardziska-Josifovska, P.A. Crozier and J.M. Cowley, A (3×3)R30° reconstruction on annealed (111) surfaces of MgO 248 (1991) L259

Magnetic measurements

A.G. Kundzich, P.P. Lutsishin, O.A. Panchenko, S.V. Sologub and V.F. Shpagin, Diffraction of conduction electrons on deuterium film-covered metal surfaces 248 (1991) 207

Metals

T.J. Raeker and A.E. DePristo, Theoretical studies of dynamical phenomena in epitaxial surface systems 248 (1991) 134
E.P. Gusev and A.P. Popov, Initial oxidation of metals: thermodynamic aspects 248 (1991) 241
E. Shustorovich and A.T. Bell, An analysis of Fischer–Tropsch synthesis by the bond-order-conservation-Morse-potential approach 248 (1991) 359

Methane

L. Hanley, Z. Xu and J.T. Yates, Jr., Methane activation on Ni(111) at high pressures 248 (1991) L265

Methanol

W. Erley, R. Butz and S. Mantl, External infrared reflection absorption spectroscopy of methanol on an epitaxially grown Si(100)2 × 1 surface 248 (1991) 193

Nickel

R.J.H. Kappert, M. Sacchi, J.B. Goedkoop, M. Grioni and J.C. Fuggle, X-ray dichroism of Dy overlayers on Ni(110) 248 (1991) L245

F.L. Hutson, D.E. Ramaker and B.E. Koel, Spectroscopic evidence for carbon–carbon bonding in "carbidic" layers on metals 248 (1991) 104

F.L. Hutson, D.E. Ramaker, B.E. Koel and S.C. Gebhard, Interpretation of the carbon Auger line shapes for the adsorption and decomposition of ethylene on Ni(100) 248 (1991) 119

U. Diebold, W. Möller and P. Varga, Low-energy ion impact desorption cross sections of carbon monoxide from Ni(111) 248 (1991) 147

L. Hanley, Z. Xu and J.T. Yates, Jr., Methane activation on Ni(111) at high pressures 248 (1991) L265

Nitrogen

Q. Dai and A.J. Gellman, A structural examination of nitrogen on Cu(100) and Cu(110) surfaces 248 (1991) 86

Organic substances

C. Houtman and M.A. Barteau, Reactions of formic acid and formaldehyde on Rh(111) and Rh(111)–(2 × 2)O surfaces 248 (1991) 57

K.A. Magrini, S.C. Gebhard, B.E. Koel and J.L. Falconer, Methyl chloride and trichlorosilane adsorption on Cu(110) 248 (1991) 93

Y. Song, P. Gardner, H. Conrad, A.M. Bradshaw and J.M. White, A HREELS study of the UV photon-induced chemistry of C_6H_5Cl adsorbed on Ag{111} 248 (1991) L279

M.A. Henderson, G.E. Mitchell and J.M. White, CH_3 and CH_3I chemistry on Pt(111): the influence of CO 248 (1991) 279

Oxides

A. Goehlich, M. Röwekamp and H.F. Döbele, Determination of the velocity distribution of sputtered atomic oxygen by laser-induced fluorescence in the vacuum-ultraviolet (130 nm) 248 (1991) 271

Oxygen

M. Wolf, E. Hasselbrink, G. Ertl, X.-Y. Zhu and J.M. White, Excitation mechanism in the photodissociation of dioxygen adsorbed on Pd(111) 248 (1991) L235

H. Pfnür, M. Lindroos and D. Menzel, Investigation of adsorbates with low energy electron diffraction at very low energies (VLEED) 248 (1991) 1

A. Yanase and H. Komiyama, In situ observation of oxidation and reduction of small supported copper particles using optical absorption and X-ray diffraction 248 (1991) 11

P. Novacek and P. Varga, Analyses of the adsorption of oxygen and hydrogen on Pt_xNi_{1-x} alloys using ion scattering spectroscopy 248 (1991) 183

V.M. Bermudez and S.M. Prokes, Infrared reflection absorption spectroscopy of adsorbates on semiconductors with buried metal layers – O_2/GaAs 248 (1991) 201

Palladium

M. Wolf, E. Hasselbrink, G. Ertl, X.-Y. Zhu and J.M. White, Excitation mechanism in the photodissociation of dioxygen adsorbed on Pd(111) 248 (1991) L235

P.J. Schmitz, H.C. Kang, W.-Y. Leung and P.A. Thiel, Growth mode and CO adsorption properties of Au films on Pd(110) 248 (1991) 287

Photodesorption

B.G. Koehler and S.M. George, Laser-induced desorption of H_2 from Si(111)-7 × 7 248 (1991) 158

Photoelectron spectroscopy

J.L. Bischoff, F. Lutz, D. Bolmont and L. Kubler, UPS differentiation between molecular NH_3 and partially dissociated NH_2 fragments adsorbed at low temperature on Si(001) surfaces 248 (1991) L240
S. Kennou and T.A. Nguyen Tan, Potassium adsorption on β-$FeSi_2$ thin films 248 (1991) L255
A.L. Tofterup, Depth profiling through quantitative analysis of energy spectra in XPS and AES: analytical formalism 248 (1991) 77
F.L. Hutson, D.E. Ramaker and B.E. Koel, Spectroscopic evidence for carbon–carbon bonding in "carbidic" layers on metals 248 (1991) 104
L. Hanley, Z. Xu and J.T. Yates, Jr., Methane activation on Ni(111) at high pressures 248 (1991) L265

Platinum

Q. Gao and J.C. Hemminger, A vibrational spectroscopy study of CH_3COOH,CH_3COOD and $^{13}CD_3COOH$ (D) adsorption on Pt(111). I. Surface dimer formation and hydrogen bonding 248 (1991) 45
M.A. Henderson, G.E. Mitchell and J.M. White, CH_3 and CH_3I chemistry on Pt(111): the influence of CO 248 (1991) 279

Raman scattering

D.T. Schwartz and R.H. Muller, Oxidation films on copper in alkaline media: intensity modulated photoelectrochemical and Raman spectroscopy studies 248 (1991) 349

Rhodium

C. Houtman and M.A. Barteau, Reactions of formic acid and formaldehyde on Rh(111) and Rh(111)–(2 × 2)O surfaces 248 (1991) 57

Ruthenium

H. Pfnür, M. Lindroos and D. Menzel, Investigation of adsorbates with low energy electron diffraction at very low energies (VLEED) 248 (1991) 1

Silicides

S. Kennou and T.A. Nguyen Tan, Potassium adsorption on β-$FeSi_2$ thin films 248 (1991) L255

Silicon

J.L. Bischoff, F. Lutz, D. Bolmont and L. Kubler, UPS differentiation between molecular NH_3 and partially dissociated NH_2 fragments adsorbed at low temperature on Si(001) surfaces 248 (1991) L240
Z.-Y. Zhang, Y.-T. Lu and H. Metiu, Adsorption and diffusion sites of a Si atom on a reconstructed Si(100)–(2 × 1) surface 248 (1991) L250
P.F.A. Alkemade, W.N. Lennard and I.V. Mitchell, The transport of keV energy electrons in Si studied by ion-induced Auger excitation in combination with channeling 248 (1991) 173
W. Erley, R. Butz and S. Mantl, External infrared reflection absorption spectroscopy of methanol on an epitaxially grown Si(100)2 × 1 surface 248 (1991) 193
Y.-W. Mo and M.G. Lagally, Anisotropy in surface migration of Si and Ge on Si(001) 248 (1991) 313
U. Köhler, O. Jusko, G. Pietsch, B. Müller and M. Henzler, Strained-layer growth and islanding of germanium on Si(111)–(7 × 7) studied with STM 248 (1991) 321

Silver

M. Höpfner, W. Obretenov, K. Jüttner, W.J. Lorenz, G. Staikov, V. Bostanov and E. Budevski, STM studies of real and quasi-perfect silver single crystal surfaces used in electrochemical experiments 248 (1991) 225
G. Staikov, E. Budevski, M. Höpfner, W. Obretenov, K. Jüttner and W.J. Lorenz, New aspects in underpotential–overpotential transitions in metal deposition processes 248 (1991) 234
Y. Song, P. Gardner, H. Conrad, A.M. Bradshaw and J.M. White, A HREELS study of the UV photon-induced chemistry of C_6H_5Cl adsorbed on Ag{111} 248 (1991) L279

Solid–electrolyte interface

M. Höpfner, W. Obretenov, K. Jüttner, W.J. Lorenz, G. Staikov, V. Bostanov and E. Budevski, STM studies of real

and quasi-perfect silver single crystal surfaces used in electrochemical experiments 248 (1991) 225
G. Staikov, E. Budevski, M. Höpfner, W. Obretenov, K. Jüttner and W.J. Lorenz, New aspects in underpotential–overpotential transitions in metal deposition processes 248 (1991) 234
D.T. Schwartz and R.H. Muller, Oxidation films on copper in alkaline media: intensity modulated photoelectrochemical and Raman spectroscopy studies 248 (1991) 349

Sputtering

A. Goehlich, M. Röwekamp and H.F. Döbele, Determination of the velocity distribution of sputtered atomic oxygen by laser-induced fluorescence in the vacuum-ultraviolet (130 nm) 248 (1991) 271
H. Sumi, Theory on laser sputtering by high-density valence-electron excitation of semiconductor surfaces 248 (1991) 382

Surface defects

R. Kariotis and M.G. Lagally, Calculation of terrace-edge structure distributions for vicinal surfaces 248 (1991) 295

Surface diffusion

Z.-Y. Zhang, Y.-T. Lu and H. Metiu, Adsorption and diffusion sites of a Si atom on a reconstructed Si(100)–(2×1) surface 248 (1991) L250
Y.-W. Mo and M.G. Lagally, Anisotropy in surface migration of Si and Ge on Si(001) 248 (1991) 313

Surface roughness

R. Kariotis, Terrace-edge separation distribution 248 (1991) 306

Surface structure, see also Low energy electron diffraction

I. Chorkendorff and P.B. Rasmussen, Reconstruction of Cu(100) by adsorption of atomic hydrogen 248 (1991) 35
Q. Dai and A.J. Gellman, A structural examination of nitrogen on Cu(100) and Cu(110) surfaces 248 (1991) 86
S.A. Chambers, Surface dimer formation on GaAs(001)–$c(2 \times 8)/(2 \times 4)$ studied by X-ray photoelectron diffraction 248 (1991) L274
R. Kariotis and M.G. Lagally, Calculation of terrace-edge structure distributions for vicinal surfaces 248 (1991) 295

Surface thermodynamics

A.G. Kundzich, P.P. Lutsishin, O.A. Panchenko, S.V. Sologub and V.F. Shpagin, Diffraction of conduction electrons on deuterium film-covered metal surfaces 248 (1991) 207

Thermal desorption

I. Chorkendorff and P.B. Rasmussen, Reconstruction of Cu(100) by adsorption of atomic hydrogen 248 (1991) 35
K.A. Magrini, S.C. Gebhard, B.E. Koel and J.L. Falconer, Methyl chloride and trichlorosilane adsorption on Cu(110) 248 (1991) 93
Y. Song, P. Gardner, H. Conrad, A.M. Bradshaw and J.M. White, A HREELS study of the UV photon-induced chemistry of C_6H_5Cl adsorbed on Ag{111} 248 (1991) L279
M.A. Henderson, G.E. Mitchell and J.M. White, CH_3 and CH_3I chemistry on Pt(111): the influence of CO 248 (1991) 279
P.J. Schmitz, H.C. Kang, W.-Y. Leung and P.A. Thiel, Growth mode and CO adsorption properties of Au films on Pd(110) 248 (1991) 287
W.-H. Hung, J. Schwartz and S.L. Bernasek, Sequential oxidation of Fe(100) by water adsorption: formation of an ordered hydroxylated surface 248 (1991) 332

Tungsten

A.G. Kundzich, P.P. Lutsishin, O.A. Panchenko, S.V. Sologub and V.F. Shpagin, Diffraction of conduction electrons on deuterium film-covered metal surfaces 248 (1991) 207

Tunneling

M. Höpfner, W. Obretenov, K. Jüttner, W.J. Lorenz, G. Staikov, V. Bostanov and E. Budevski, STM studies of real and quasi-perfect silver single crystal surfaces used in electrochemical experiments 248 (1991) 225

Y.-W. Mo and M.G. Lagally, Anisotropy in surface migration of Si and Ge on Si(001) 248 (1991) 313

U. Köhler, O. Jusko, G. Pietsch, B. Müller and M. Henzler, Strained-layer growth and islanding of germanium on Si(111)–(7 × 7) studied with STM 248 (1991) 321

Water

W.-H. Hung, J. Schwartz and S.L. Bernasek, Sequential oxidation of Fe(100) by water adsorption: formation of an ordered hydroxylated surface 248 (1991) 332

L. Papagno, D. Frankel, Y. Chen, L.S. Caputi, J. Anderson and G.J. Lapeyre, Study of dissociation of water on Ge(100) by high-resolution electron-energy-loss spectroscopy 248 (1991) 343

Work function

S. Kennou and T.A. Nguyen Tan, Potassium adsorption on β-$FeSi_2$ thin films 248 (1991) L255

X-ray absorption

R.J.H. Kappert, M. Sacchi, J.B. Goedkoop, M. Grioni and J.C. Fuggle, X-ray dichroism of Dy overlayers on Ni(110) 248 (1991) L245

X-ray diffraction

A. Yanase and H. Komiyama, In situ observation of oxidation and reduction of small supported copper particles using optical absorption and X-ray diffraction 248 (1991) 11

X-ray scattering

J.R. Levine, J.B. Cohen and Y.W. Chung, Thin film island growth kinetics: a grazing incidence small angle X-ray scattering study of gold on glass 248 (1991) 215